

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

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## PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)

Serie 6034

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on October 26, 2006Signature *Diana Guzman*Typed or printed name Diana Guzman

Application Number

10/628,153

Filed

July 28, 2003

First Named Inventor

Christian BONNET

Art Unit

1725

Examiner

M. Alexandra Elve

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.☐ assignee of record of the entire interest.See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)☒ attorney or agent of record.Registration number 55,254☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34 \_\_\_\_\_

Signature

*Elwood L. Haynes*  
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Telephone number

October 26, 2006

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.  
Submit multiple forms if more than one signature is required, see below\*.☐ \*Total of \_\_\_\_\_ forms are submitted.

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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Application No.: 10/628,153  
Applicants: Christian BONNET, et al.  
Filed International: July 30, 2002  
US National: July 28, 2003  
Title: BRAZED COPPER HEAT EXCHANGERS AND  
PROCESS FOR MANUFACTURING THEM BY  
WELDING  
TC/A.U. 1725  
Examiner: M. Alexandra Elve  
Docket No.: Serie 6034  
Customer No.: 40582

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Status of Claims

Claims 18, 20-39, 42, and 46-50 are pending in the application. Claims 1-17 were originally presented in the application. Claims 1-17 were cancelled, and claims 18-46 were added by way of Preliminary Amendment. During prosecution claims 47-51 were added, claims 19, 40-41, and 43-45 were cancelled, and claims 48-49 and 51 were withdrawn from consideration. Claims 18, 20-39, 42, 47, and 50 stand finally rejected as discussed below. The final rejection of claims 18, 20-39, 42, 47, and 50 is appealed.

### Status of Amendments

The amendment proposed to claim 39 after the final rejection has been entered by the Examiner.

### Summary of Claimed Subject Matter

The present invention pertains to a process for preparing a metal workpiece for arc welding. The present invention also pertains to a process for manufacturing a copper heat exchanger using this metal preparation process. The present invention also pertains to a method which may be used for welding a metal workpiece to a brazed zone that has been prepared by using this metal preparation process.

The metal preparation process involves two separate operations, the first being a brazing operation and the second being a simple deposition of a layer of alloy. The brazing operation establishes a matrix, and the second step comprises "depositing at least one layer of an alloy onto" this matrix. (claim 18) These two steps are a process for preparing the workpiece for subsequent welding.

### Grounds of Rejection

Claims 18, and 20-34 stand rejected under 35 U.S.C. § 102 (b) as being anticipated by Quaas et al. '017.

Claims 35-38 and 50 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Quaas et al. '017 in view of Davidian et al. '662.

Claims 39, 42, and 47 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Davidian et al. '662 and further in view of Quaas et al. '017 or Clark '618 or Harris '717.

Claims 46 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Davidian et al. '662 in view of Quaas et al. '017.

### Arguments

With respect to the 35 U.S.C. § 102 (b) rejection, The Examiner notes that Quaas et al. '017 "discloses welding which uses a copper based alloy that also contains tin (4-25%) and phosphorous (0.1-1%), the balance being copper." Thus, Quaas et al. '017 discloses a *single* welding alloy that contains copper, tin and phosphorous. Applicants respectfully point out that this is entirely different than what is required in claim 18 of the instant application.

Claim 18 of the instant application requires two separate operations, as discussed above in the "Summary of Claimed Subject Matter" section. Claim 18 does not require any welding to take place.

Claim 18 of the instant application requires that the brazing operation (i.e., the matrix) comprise copper and phosphorous. Claim 18 requires that the layering alloy comprise copper and at least 1.0% tin by weight. These are two different compositions, for two different layers, made by two different processes. The matrix is produced by brazing. The layered alloy "supplied in the form of a meltable wire, which is melted by using an electric arc, in particular by means of an MIG torch" (*instant specification, page 9, line 39 – page 10, line 2*).

The process required by claim 18 of the instant application is best understood by referencing Fig. 1. The brazed zone, comprising copper and phosphorous, is indicated as element 3. The layering alloy, comprising copper and at least 1.0% tin by weight, is indicated by elements 5, 6, and 7. The future weld (not within the scope of claim 18) is indicated by element 4. Elements 1 and 2 are the two workpieces that are being welded together.

It would be obvious to one skilled in the art of welding, that Quaas et al. '017, in disclosing single low melting copper base welding alloys, fails to disclose all the elements of claim 18 of the instant application. Thus the § 102 rejection is unsupported and should be withdrawn. As claims 20 – 34 are dependent upon claim 18, these rejections, as pertains to these claims, are likewise unsupported.

With respect to the 35 U.S.C. § 103(a) rejections, as discussed above, claim 18 of the instant application requires elements that are not present in Quaas et al. '017 and are likewise not disclosed in Davidian et al. '682. These same missing features are also present in claim 50 of the instant application. Therefore, this rejection is moot and should be withdrawn. As claims 35 - 38 are dependent upon claim 18, these rejections, as pertains to these claims, are likewise moot.

Claim 46 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over of Davidian et al. '662 in view of Quaas et al. '017.

The features discussed above with reference to claim 18 of the instant application requires elements that are not present in Davidian et al. '682, and are likewise not disclosed in Quaas et al. '017, are also present in claim 39 of the instant application. Therefore, this rejection is moot and should be withdrawn. As claim 46 is dependent upon claim 39, this rejection, as pertains to this claim, is likewise moot.

Claims 39, 42, and 47 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over of Davidian et al. '662 in view of either Quaas et al. '017 or Clarke '618 or Harris '717.

The features discussed above with reference to claim 18 of the instant application requires elements that are not present in Davidian et al. '682, and are likewise not disclosed in Quaas et al. '017, Clarke '618 or Harris '717, are also present in claim 39 of the instant application. Therefore, this rejection is moot and should be withdrawn. As claim 42 is dependent upon claim 39, this rejection, as pertains to this claim, is likewise moot. As claim 47 is ultimately dependent upon claim 18, this rejection, as pertains to this claim, is likewise moot.

#### Conclusion

Applicant respectfully submits that this application is free of the prior art of record and is therefore in a condition for allowance.

Respectfully submitted,



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**Date: October 26, 2006**

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